

FINAL REPORT

Grant No: NAG5-10602

CIT: DJS.00003-1-NASA.000068

Title: Support for the 2001 Gordon Research Conference on the Origins of Solar

Systems.

Funding Period: March 1, 2001 - February 28, 2002

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Major Activities

Gordon participants the for support partial grant provided This Research Conference on Origins of Solar Systems, held at Connecticut College, June 17 through June 22, 2001. This conference was chaired by the PI (David Stevenson) and Pat Cassen (NASA Ames) was Vice-Chair. In addition to the money provided by this grant (\$15,000), the Gordon Research Conference organization provided about \$22,000 (in large part from registration fees) and LPI provided \$10,000 (through Director David Black); the latter targeted primarily for students and postdocs. Accordingly the grant money from NASA was used to cover the costs of registration and travel for about one half of the invited speakers (22 in total) and discussion leaders (about 10 in total). Typical cost of participation is about \$1000/person (travel and registration; registration includes all meals and housing).

Major Accomplishments

This conference was attended by 105 scientists (including about 20 students and postdocs). This is about the right number for a Gordon Conference. The site was a good one. The meeting was lively, with much time for discussion both directly after talks and informally. Poster sessions provided the opportunity for participants to present their latest results. The meeting was judged to be highly successful on the basis of comments provided by participants in the questionnaires returned at the end of the meeting. Here is an extended quote from the letter sent to the PI in December 2001, from Carolyn Storm (Director at Gordon Research Conference headquarters):

"The Gordon Research Conference on Origins of Solar Systems has been approved for future scheduling. Congratulations on a successful meeting with good self-evaluation ratings and good diversity of conferees. Keep up the good work. The next meeting is scheduled for July 6-11, 2003 at Roger Williams University, Bristol, Rhode Island."

Pat Cassen will run the next conference.

Publications: By long-standing tradition, there is no publication or dissemination of material presented at any Gordon Conference. The program for the conference is appended.

Origins of Solar Systems Gordon Conference

Connecticut College, 270 Mohegan Avenue, New London, CT 06320 June 17-22

> Dave Stevenson, Chair Pat Cassen, Vice-chair

Sunday, June 17

2:00-11:00 p.m. Arrival and Registration 6:00 p.m. Dinner

7:30 p.m. First Session Disks Discussion leader: Pat Cassen

7:40 – 8:20 Lynne Hillenbrand
"Observational Constraints on the Evolution of Circumstellar disks"

8:20- 8:40 Discussion

8:40 –9:20 Eugene Chiang

"Disk Structure and Angular Momentum Transport"

9:20 -9:40 Discussion

Monday, June 18

7:30-8:30 a.m. Breakfast

9:00a.m. Second Session Extrasolar Planets

Discussion leader: Tim Brown

9:10 - 9:50 Debra Fischer

"Observational Properties of Extrasolar Planetary Systems"

9:50-10:10 Discussion

10:10-10:30 a.m. Coffee Break

10:30 –11:10 Maria Osorio Zapatero

"Observations of Brown Dwarfs and Isolated Planetary Objects"

11:10-11:30 Discussion

11:30 – 12:10 David Charbonneau

"Transit Observations of Extrasolar Planets"

12:10-12:30 Discussion

12:30 Group Photo followed by Lunch

Afternoon free

4:30 -6:00 p.m. First Poster session (posters stay up for two days)

6:00 p.m. Dinner

7:30 p.m. Third Session Stability and Migration of Planets

Discussion Leader: Martin Duncan

7:40 -8:20 Renu Malhotra

"Stability of Planetary systems"

8:20 – 8:40 Discussion

8:40 –9:20 Joe Hahn

" Planet and Planetesimal migration in the Early Solar system "

9:20 -9:40 Discussion

Tuesday, June 19

7:30 -8:30 Breakfast

9:00 Fourth Session Formation of solid Bodies

Discussion leader: Robin Canup

9:10 –9:50 John Chambers

" Formation of asteroids "

9:50 -10:10 Discussion

10:10-10:30 Coffee Break

10:30 -11:10 Shigeru Ida

"Formation of Terrestrial planets"

11:10-11:30 Discussion

11:30 –12:10 Alex Halliday

" Isotopic constraints on the Formation of terrestrial Bodies"

12:10-12:30 Discussion

12:30 Lunch

Afternoon free

4:30-6:00 p.m. Continuation of first poster session.

6:00 p.m. Dinner

7:30 p.m. Fifth Session Giant Planets and Disk Dispersal

Discussion Leader: Bill Ward

7:40-8:20 Morris Podolak

" Models of Giant planet Formation"

8:20 -8:40 Discussion

8:40 –9:20 David Hollenbach
"Disk Dispersal around Young Low Mass Stars"
9:20 – 9:40 Discussion

Wednesday, June 20

7:30 -8:30 a.m. Breakfast

9:00 a.m. Sixth Session Interstellar Matters

Discussion Leader: Joe Nuth

9:10 -9:50 Larry Nittler

"Preservation of Interstellar Material in the Solar system"

9:50 - 10:10 Discussion

10:10- 10:30 Coffee Break

10:30 - 11:10 Don Clayton

"Supernova Grains: The Lessons"

11:10-11:30 Discussion

11:30 –12:30 Business meeting

12:30 Lunch

Afternoon Free

4:30 -6:00 p.m. Second Poster session

6:00 p.m. Dinner

7:30 p.m. Seventh Session Isotopes

Discussion leader: Stein Jacobsen

7:40 - 8:20 Laurie Leshin

"Isotopic Heterogeneity in the Solar system"

8:20-8:40 Discussion

8:40 –9:20 Kevin McKeegan

" Short lived Radionuclides in the Solar System"

9:20-9:40 Discussion

Thursday, June 21

7:30-8:30 Breakfast

9:00a.m. <u>Eighth Session</u> Kuiper Belt Discussion Leader: Norm Murray 9:10 –9:50 Jane Luu
" Observations of the Kuiper Belt " 9:50 –10:10 Discussion

10:10-10:30 Coffee Break

10:30 –11:10 Hal Levison
" Dynamics of the Kuiper Belt "
11:10 –11:30 Discussion

11:30 –12:30 Panel discussion: Outstanding Problems. What do we have to Observe, Measure and Compute? Panel Members to be determined. Organized by Dave Stevenson

12:30 Lunch Afternoon Free 4:30-6:00 p.m. Continuation of Second Poster session. 6:00 p.m. Dinner

7:30 p.m. <u>Ninth Session</u> Comets and Icy Bodies **Discussion leader: Stu Weidenschilling**

7:40- 8:20 Anita Cochran
" Cometary Observations: Implications for Outer Solar Nebular Composition"
8:20- 8:40 Discussion

8:40 –9:20 Alessandro Morbidelli
" Distribution of Water in the Solar System"
9:20 –9:40 Discussion

Friday, June 22

7:30- 8:30 Breakfast 9:00 am sharp, buses depart.